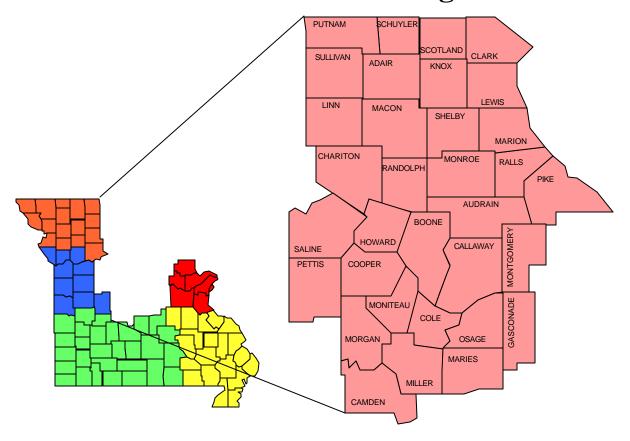
North Central HIV Region



2000 Population Estimates for the North Central HIV Region

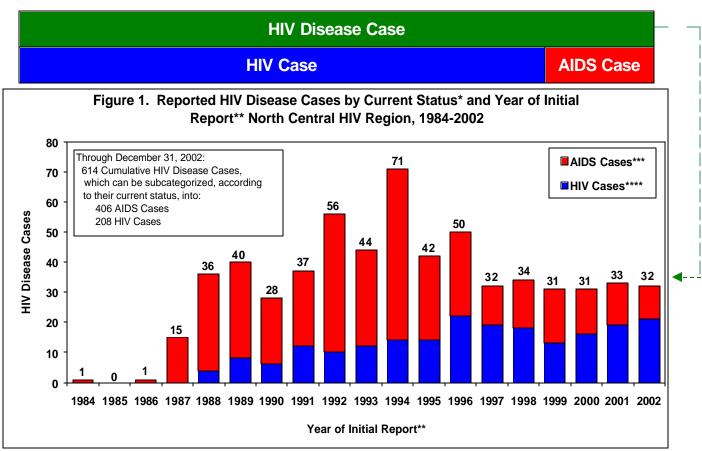
		-								•		
County	Whi	te	African A	merican	American	Indian	Asian/P	acific Is	Hispa	anic	Tot	al
Adair County	23,932	95.8%	299	1.2%	64	0.3%	359	1.4%	315	1.3%	24,977	100.0%
Audrain County	23,547	91.1%	1,859	7.2%	68	0.3%	97	0.4%	189	0.7%	25,853	100.0%
Boone County	115,714	85.4%	11,572	8.5%	567	0.4%	4,057	3.0%	2,413	1.8%	135,454	100.0%
Callaway County	37,420	91.8%	2,307	5.7%	210	0.5%	215	0.5%	377	0.9%	40,766	100.0%
Camden County	36,190	97.7%	95	0.3%	181	0.5%	121	0.3%	346	0.9%	37,051	100.0%
Chariton County	8,100	96.0%	269	3.2%	14	0.2%	11	0.1%	47	0.6%	8,438	100.0%
Clark County	7,312	99.3%	8	0.1%	8	0.1%	6	0.1%	33	0.4%	7,367	100.0%
Cole County	62,158	87.1%	7,084	9.9%	239	0.3%	651	0.9%	915	1.3%	71,397	100.0%
Cooper County	14,844	89.0%	1,493	9.0%	60	0.4%	42	0.3%	143	0.9%	16,670	100.0%
Gasconade County	15,141	98.7%	18	0.1%	28	0.2%	25	0.2%	64	0.4%	15,342	100.0%
Howard County	9,306	91.1%	699	6.8%	34	0.3%	20	0.2%	88	0.9%	10,212	100.0%
Knox County	4,296	98.5%	4	0.1%	1	0.0%	4	0.1%	26	0.6%	4,361	100.0%
Lewis County	10,066	95.9%	265	2.5%	17	0.2%	23	0.2%	77	0.7%	10,494	100.0%
Linn County	13,476	98.0%	82	0.6%	52	0.4%	19	0.1%	104	0.8%	13,754	100.0%
Macon County	15,160	96.2%	349	2.2%	61	0.4%	27	0.2%	121	0.8%	15,762	100.0%
Maries County	8,674	97.4%	29	0.3%	49	0.6%	10	0.1%	103	1.2%	8,903	100.0%
Marion County	26,382	93.3%	1,308	4.6%	75	0.3%	101	0.4%	252	0.9%	28,289	100.0%
Miller County	23,090	98.0%	65	0.3%	108	0.5%	35	0.1%	231	1.0%	23,564	100.0%
Moniteau County	13,752	92.7%	561	3.8%	59	0.4%	48	0.3%	435	2.9%	14,827	100.0%
Monroe County	8,814	94.7%	357	3.8%	38	0.4%	14	0.2%	52	0.6%	9,311	100.0%
Montgomery County	11,647	96.0%	248	2.0%	29	0.2%	32	0.3%	94	0.8%	12,136	100.0%
Morgan County	18,796	97.3%	98	0.5%	122	0.6%	27	0.1%	161	0.8%	19,309	100.0%
Osage County	12,884	98.6%	21	0.2%	31	0.2%	13	0.1%	77	0.6%	13,062	100.0%
Pettis County	36,275	92.1%	1,197	3.0%	148	0.4%	175	0.4%	1,527	3.9%	39,403	100.0%
Pike County	16,230	88.4%	1,682	9.2%	44	0.2%	35	0.2%	295	1.6%	18,351	100.0%
Putnam County	5,178	99.1%	3	0.1%	5	0.1%	7	0.1%	32	0.6%	5,223	100.0%
Ralls County	9,427	97.9%	107	1.1%	19	0.2%	9	0.1%	42	0.4%	9,626	100.0%
Randolph County	22,339	90.6%	1,734	7.0%	118	0.5%	103	0.4%	282	1.1%	24,663	100.0%
Saline County	21,387	90.0%	1,280	5.4%	73	0.3%	134	0.6%	1,050	4.4%	23,756	100.0%
Schuyler County	4,105	98.4%	2	0.0%	13	0.3%	7	0.2%	27	0.6%	4,170	100.0%
Scotland County	4,924	98.8%	10	0.2%	7	0.1%	5	0.1%	42	0.8%	4,983	100.0%
Shelby County	6,654	97.9%	66	1.0%	19	0.3%	7	0.1%	43	0.6%	6,799	100.0%
Sullivan County	6,855	95.0%	10	0.1%	18	0.2%	15	0.2%	634	8.8%	7,219	100.0%
Region Totals	654,075	91.9%	35,181	4.9%	2,579	0.4%	6,454	0.9%	10,637	1.5%	711,492	100.0%

Source: U.S. Census Bureau

Magnitude and Impact of the Problem

- From 1984 through 2002, a total of 614 HIV Disease cases have been reported in residents of the North Central HIV Region*. In 2002, 32 new HIV Disease cases were reported for the first time to public health officials. Figure 1 shows reported HIV Disease cases by current status (HIV case vs. AIDS case) and year of initial report (i.e., the year in which the <u>first</u> report of the person, whether as an HIV case or an AIDS case, was received). (See also the section entitled "**Trends**" on page 159.)
- Of these 614 HIV Disease cases, 406 (66.1%) have met the case definition for AIDS and are thus categorized as AIDS cases; 197 (48.5%) of the 406 reported AIDS cases are known to have died, and 209 (51.5%) are living. In 2002, 20 AIDS cases were reported. Figure 2 (on page 156) shows persons (living and deceased) diagnosed with AIDS by year of report (see also the section entitled "**Trends**" on page 159).
- Of the 614 reported HIV Disease cases, 208 (33.9%) have not met the case definition for AIDS, and are thus categorized as HIV cases; 21 HIV cases* were reported in 2002.

^{*}When reference is made to HIV cases reported in 2002, this means HIV cases reported during that year which <u>remained</u> HIV cases at the end of the year. Those HIV cases reported in 2002 which later in the year became AIDS cases are not included (instead, they are included among the AIDS cases reported in 2002).

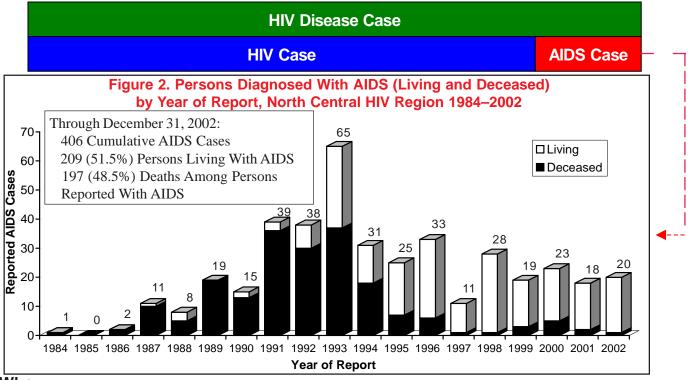


^{*}HIV Cases vs. AIDS Cases

^{**}Cases are indicated by year of their initial report to the Missouri Department of Health and Senior Services (i.e., by the year in which the first report of the person, whether as an HIV case or an AIDS case, was received by the department.)

^{***}These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they had subsequently come to meet the AIDS case definition; or 2) initially reported as an AIDS case.

^{****}These cases were initially reported as HIV cases, and have subsequently remained HIV cases (i.e., they have not met the case definition for AIDS).



Who

- Table 1 describes HIV cases, AIDS cases, and HIV Disease cases by gender, race/ethnicity, and age at diagnosis.
- Males comprise 75.5% of the 208 cumulative reported HIV cases and 83.0% of the 406 cumulative reported AIDS
 cases.
- Blacks* are disproportionately represented among reported HIV Disease cases. Although blacks make up only about 5% of the North Central HIV Region's population, they have accounted for 25.5% of reported HIV cases and 18.2% of reported AIDS cases. The rate for HIV cases reported in 2002 in blacks (22.7) was 11.4 times the rate in whites* (2.0).
- The over-representation of blacks is especially seen in reported HIV and AIDS cases in females. Of the 51 reported female HIV cases, 19 (37.3%) were in black females. Of the 69 reported female AIDS cases, 20 (29.0%) were in black females.
- For Hispanics, the numbers of reported HIV and AIDS cases have been very small (3 cumulative HIV cases with no cases reported in 2002; 7 cumulative AIDS cases with 3 cases reported in 2002).
- The numbers of total reported HIV and AIDS cases in Asians and in American Indians have also been very small (1 HIV case and 3 AIDS cases in Asians; 0 HIV cases and 1 AIDS case in American Indians).
- Of the 208 reported HIV cases, 43.8% were diagnosed in 20-29 year olds, 36.1% in 30-39 year olds, 12.0% in 40-49 year olds, 4.3% in 13-19 year olds, and 2.9% in persons 50 years of age and older.
- Of the 206 reported adult/adolescent HIV cases: 104 (50.5%) were in men who have sex with men (MSM); 11 (5.3%) in men who have sex with men and inject drugs (MSM/IDU); 20 (9.7%) in injecting drug users (IDUs); 46 (22.3%) in heterosexual contacts; and 23 (11.2%) are still being investigated and have not yet been placed in a specific exposure category.
- Of the 397 reported adult/adolescent AIDS cases: 222 (55.9%) were in MSM; 27 (6.8%) in MSM/IDUs; 25 (6.3%) in IDUs; 60 (15.1%) in heterosexual contacts; and 18 (4.5%) are still being investigated and have not yet been placed in a specific exposure category.
- Table 2 shows HIV and AIDS cases by adjusted exposure category. In this table, those cases currently classified as
 "Other/Unknown Adult," many of which are still under investigation, have been assigned to a specific exposure category
 (i.e., MSM, MSM/IDU, IDU, heterosexual contact) in order to more clearly depict trends in reported HIV/AIDS cases.
 The proportion of these cases assigned to a given exposure category is based on past experience with Other/
 Unknown Adult cases whose exposure risk has been determined following investigation.
- A total of 2 perinatal HIV cases and 9 perinatal AIDS cases have been reported. No perinatal HIV cases were reported
 in 2002; 2 AIDS cases were reported in 2002. (Perinatal cases are the result of HIV transmission from an infected
 mother to her infant before or at the time of birth, or through breastfeeding.)

^{*}Throughout this document, whenever HIV disease is being discussed, the term "white" indicates a non-Hispanic white person, and "black" indicates a non-Hispanic black person. All persons whose ethnicity is reported as Hispanic, regardless of race (e.g., white or black), are characterized as "Hispanic".

HIV Disease Case

HIV Case

AIDS Case

Table 1. Reported HIV and AIDS Cases by Gender, Race/Ethnicity, and Age at Diagnosis, North Central HIV Region, 1982–2002

		HIV	Cases		,	AIDS	Cases		HIV Dis	sease
Re	porte	ed 2002*	Cum	ulative	Report	ted 2002	Cum	ulative	Cumul	ative
Ca	ses	%	Cases	%	Cases	%	Cases	%	Cases	%
Gender										
Male	14	(66.7%)	157	(75.5%)	15	(75.0%)	337	(83.0%)	494	(80.5%)
Female	7	(33.3%)	51	(24.5%)	5	(25.0%)	69	(17.0%)	120	(19.5%)
Race/Ethnicity										
White		(61.9%)	149		10		321		470	(76.5%)
Black		(38.1%)	53		7		74		127	(20.7%)
Hispanic		(0.0%)	3		3		7		10	(1.6%)
Asian/Pacific Islander		(0.0%)	1		–		3		4	(0.7%)
American Indian		(0.0%)	0				1		1	(0.2%)
Unknown	0	(0.0%)	2	(1.0%)			0	(0.0%)	2	(0.3%)
Race/Ethnicity and Gender										
White Male		(47.6%)	119		10		275		394	(64.2%)
Black Male		(19.0%)	34		4		54		88	(14.3%)
Hispanic Male			2		1	` /	4		6	(1.0%)
Asian/Pacific Islander Male			0		–		3		3	(0.5%)
American Indian Male		_	0		–		1		1	(0.2%)
Unknown Male		-	2	(1.0%)			0	(0.0%)	2	(0.3%)
White Female	3	(14.3%)	30	(14.4%)	0	(0.0%)	46	(11.3%)	76	(12.4%)
BlackFemale	4	(19.0%)	19	(9.1%)	3	(15.0%)	20	(4.9%)	39	(6.4%)
Hispanic Female	0	(0.0%)	1	(0.5%)	2	(10.0%)	3	(0.7%)	4	(0.7%)
Asian/Pacific Islander Female			1		–		0		1	(0.2%)
American Indian Female		-	0		–		0		0	(0.0%)
Unknown Female		-	0	(0.0%)	–		0	(0.0%)	0	(0.0%)
Age at Diagnosis‡										
<13	0	(0.0%)	2	(1.0%)	1	(5.0%)	6	(1.5%		
13-19		(4.8%)	9		1	(5.0%)	9	(2.2%)		
20-29		(42.8%)	91		0		87	(21.4%)		
30-39		(38.1%)	75		9		163	(40.1%)		
40-49		(9.5%)	25		6		92	(22.7%)		
50+	1	(4.8%)	6	(2.9%)	3	(15.0%)	49	(12.1%)		
North Central HIV Region Total	21 (⁻	100.0%)	208	(100.0%)	20 ((100.0%)	406	(100.0%)	614	(100.0%)

^{*}HIV Cases reported during 2002 which remained HIV cases at the end of that year.

Table 2. HIV and AIDS Cases by Adjusted Exposure Category*, North Central HIV Region Cumulative Through December 2002

	HIV	Cases	AIDS Cases			
	Cumulative			Cumulative		
Exposure Category	Case	%	Case	%		
Adult/Adolescent						
Men Who Have Sex With Men	117	(56.8%)	233	(58.7%)		
Men Who Have Sex With Men						
& Inject Drug	11	(5.3%)	28	(7.1%)		
Injecting Drug Use	21	(10.2%)	25	(6.3%)		
Heterosexual Contact	55	(26.7%)	66	(16.6%)		
Hemophilia/Coagulation Disorder	2	(1.0%)	28	(7.1%)		
Blood Transfusion or Tissue Recipient	0	(0.0%)	17	(4.3%)		
Risk Not Specified						
Adult/Adolescent Subtotal	206	(100.0%)	397	(100.0%)		
Pediatric Subtotal	2	•••••	9			
Total	208		406			

^{*}Cases currently classified as "Other/Unknown Adult," many of which are still under investigation, have been assigned to a specific exposure category in order to more clearly depict trends in reported HIV/AIDS cases. The proportion of Other/Unknown Adult cases assigned to a given exposure category is based on past experience with Other/Unknown Adult cases whose risk has been determined following investigation. Such experience indicates that almost all Other/Unknown Adult cases whose exposure risk is eventually determined will be placed in one of four exposure categories: men who have sex with men, men who have sex with men and inject drugs, injecting drug use, or heterosexual contact.

[‡]For HIV Cases, Age at Diagnosis is the age at which the individual was first diagnosed with HIV infection. For AIDS Cases, Age at Diagnosis is the age at which the individual was first diagnosed with AIDS.

Where

- Of the 208 cumulative HIV cases reported from the North Central HIV Region, 100 (48.1%) were from Boone County; 25 (12.0%) from Cole County; and 10 (4.1%) from Callaway County. The remaining 75 (35.1%) of cases came from 22 other counties in the region; each of these counties had 1-8 reported cases. See Figure 9 in the "Missouri" section (page 51). Of the 53 cumulative HIV cases reported in blacks, the majority were from Boone County (54.7%) and Cole County (22.6%).
- Of the 406 cumulative AIDS cases reported from the North Central HIV Region, 177 (43.6%) were from Boone County; 39 (9.6%) from Cole County; 19 (4.7%) from Callaway County; and 18 (4.4%) from Pettis County. The remaining 153 (38.0%) of cases came from 25 other counties in the region; each of these counties had 1-14 cases. See Figure 10 in the "Missouri" section (page 51). Of the 74 cumulative AIDS cases reported in blacks, the majority were from Boone County (52.7%) and Cole County (18.9%).
- Tables 3 and 4 summarize cumulative reported HIV and AIDS cases by area.
- Table 8 in the "Missouri" section (page 50) compares the numbers and rates of HIV and AIDS cases reported from persons in the North Central HIV Region with corresponding numbers and rates of HIV and AIDS cases reported from other areas in the state.
- Table 9 in the "Missouri" section (page 51) shows numbers and rates of HIV cases reported in 2002 by race/ethnicity for Outstate Missouri, and compares these figures with those for HIV cases reported from St. Louis City, St. Louis County, and Kansas City.
- Table 10 in the 'Missouri" section (page 51) shows numbers and rates of HIV cases reported in 2002 by race/ ethnicity for the North Central HIV Region, and compares these figures with those for HIV cases reported from Missouri's other HIV Regions.
- Figure 8 in the "Missouri" section (page 49) shows, for the counties within the region (as well as for the entire state), the numbers of living HIV Disease cases who have been reported to the Missouri Department of Health and Senior Services and who were residents of these counties when diagnosed.

Table 3. Reported HIV Cases by Race/Ethnicity and Area North Central HIV Region, Cumulative Through December 2002

Geographic	То	tal	White, Non	-Hispanic	Black, Non	-Hispanic
Area	Cases	%	Cases	%	Cases	%
Boone County [†]	100	100.0%	68	68.0%	29	29.0%
Cole County [†]	25	100.0%	12	48.0%	12	48.0%
Callaway County †	10	100.0%	8	80.0%	2	20.0%
Marion County [†]	8	100.0%	4	42.9%	4	57.1%
Pettis County [†]	6	100.0%	5	83.3%	1	16.7%
Gasconade County [†]	6	100.0%	6	100.0%	0	0.0%
Remainder of Region [†]	53	100.0%	46	86.8%	5	9.4%
North Central HIV Region [†]	208	100.0%	149	71.6%	53	25.5%

 $^{^\}dagger \text{Does not include persons living in correctional facilities at the time of diagnosis.}$ Note: Row percentages are shown.

Table 4. Reported AIDS Cases by Race/Ethnicity and Area North Central HIV Region, Cumulative Through December 2002

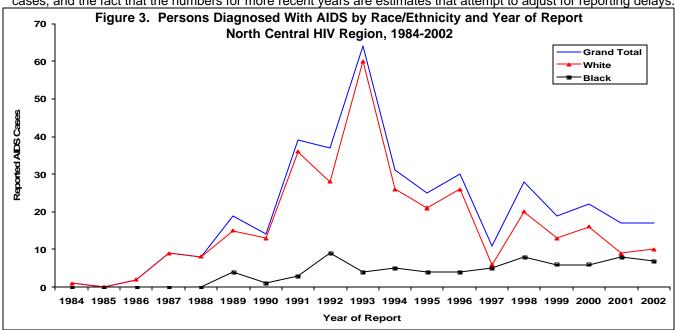
Geographic		tal	White, Non	•	Black, Non	•
Area	Cases	<u>%</u>	Cases	<u>%</u>	Cases	%
Boone County [†]	177	100.0%	135	76.3%	39	22.0%
Cole County [†]	39	100.0%	22	56.4%	14	35.9%
Callaway County [†]	19	100.0%	16	84.2%	3	15.8%
Pettis County [†]	18	100.0%	16	88.9%	1	5.6%
Randolph County [†]	14	100.0%	12	85.7%	2	14.3%
Remainder of Region [†]	139	100.0%	120	86.3%	15	10.8%
North Central HIV Region [†]	406	100.0%	321	79.1%	74	18.2%

 $^{^\}dagger\text{Does}$ not include persons living in correctional facilities at the time of diagnosis. Note: Row percentages are shown.

Row total includes American Indians, Asians and other cases not shown in the table/s. As such, the total of white, black and Hispanic cases shown in the table/s may not add up to the total cases.

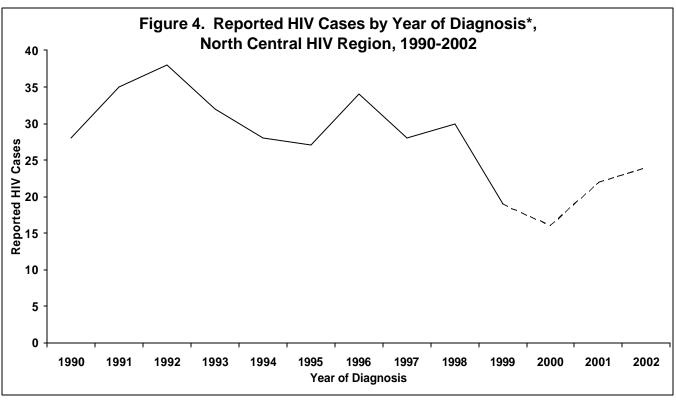
Trends

- The 32 HIV Disease cases initially reported in North Central HIV Region residents in 2002 represent a 3.0% decrease from the 33 cases reported in 2001. (see Figure 1 on page 155). The annual number of initially reported HIV Disease cases has remained stable at 31-33 reported cases for each of the past five years.
- The 20 AIDS cases reported in 2002 represented a 11.1% increase from the 18 cases reported in 2001 (see Figure 2 on page 156).
- From 2001 to 2002, the number of reported AIDS cases in whites increased by 11.1% (from 9 cases reported in 2001 to 10 cases in 2002), while the number of reported cases in blacks decreased by 12.5% (from 8 cases reported in 2001 to 7 cases in 2002). See Figure 3.
- Comparing reported HIV cases (which generally represent persons more recently infected with HIV) with reported AIDS cases (which generally represent persons less recently infected) is a potential means of discerning which groups are increasingly becoming involved in the epidemic.
 - As indicated in Table 1 (page 157), a somewhat higher proportion of cumulative HIV cases, compared to cumulative AIDS cases, tend to be female and black, providing some evidence that among more recently infected persons a slightly larger proportion may be female and black.
 - In Table 2 (page 157), cases currently placed in the "Other/Unknown" exposure category have been reassigned to a specific exposure category (such as MSM or heterosexual contact) based on past experience in reassigning such cases following investigation. As a result, HIV and AIDS cases can be better compared with regard to involvement in the epidemic by persons in different exposure categories. The data contained in Table 2 indicate that a higher proportion of cumulative HIV cases, compared to AIDS cases, are heterosexual contacts. This provides some evidence that among more recently infected persons, an increasing proportion are heterosexual contacts. (However, the largest <u>number</u> of new infections may well continue to result from male homosexual contact.)
- Figure 4 shows reported HIV cases by year of diagnosis for the period from 1990-2002. The annual number of diagnosed cases generally decreased during the period from 1992 to 2000. In 2001, the number of diagnosed cases increased by about 8 cases from the number reported the preceding year, and by another case in 2002.
- Figures 5-6 show reported HIV cases by year of diagnosis according to gender and race/ethnicity. Care should be exercised in interpreting these graphs (and the similar graphs which follow) given the relatively small numbers of cases, and the fact that the numbers for more recent years are estimates that attempt to adjust for reporting delays.

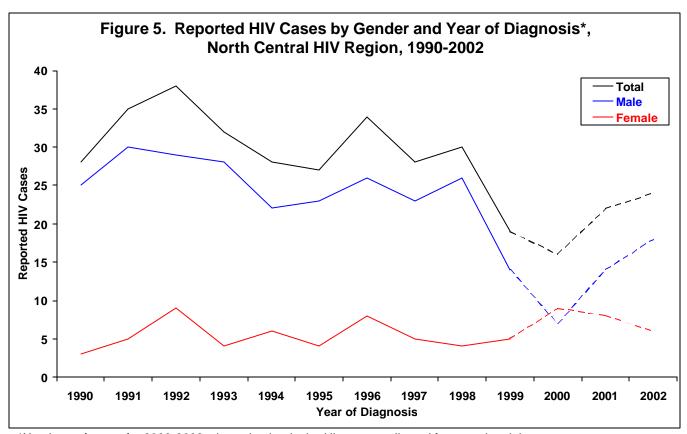


¹ The HIV cases shown in Figures 4-6 represent individuals who were HIV cases (i.e., HIV infected but not AIDS) at the time of initial diagnosis of HIV infection. Some of these individuals have subsequently progressed to AIDS, while the rest currently remain HIV cases. However, in these figures, where the emphasis is on status at the time of initial diagnosis, all are considered HIV cases. (This is in contrast to the way data is presented in Table 1 and similar tables. In these tables, once an individual who is an HIV case meets the case definition for AIDS, he or she is no longer counted as an HIV case, and instead is counted as an AIDS case.)

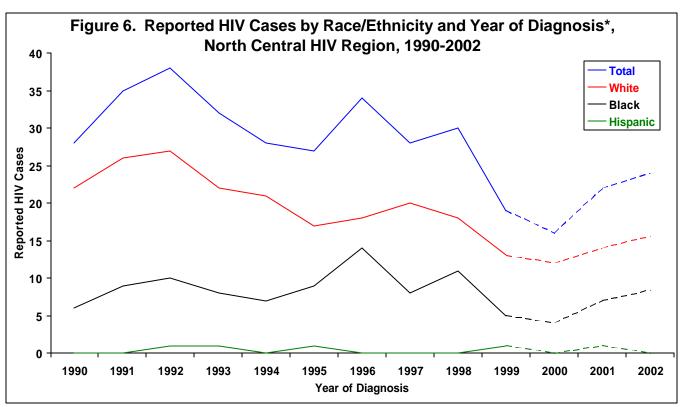
Adjustments were made for delays in reporting of cases. That is, for more recent years, not all cases diagnosed during these years have been reported as yet. To adjust for this, estimates were made, based on past experience, of the additional number of cases expected to ultimately be reported, and these expected cases were added to those already reported to give the estimated total number of cases for a given year as shown in the figure.



^{*}Numbers of cases for 2000-2002, shown by the dashed lines, are adjusted for reporting delays.



^{*}Numbers of cases for 2000-2002, shown by the dashed lines, are adjusted for reporting delays.



^{*}Numbers of cases for 2000-2002, shown by the dashed lines, are adjusted for reporting delays.

Men Who Have Sex With Men (MSM)

Magnitude of the Problem

- From 1984 through 2002, a total of 326 HIV Disease cases in MSM have been reported in North Central HIV Region residents. These cases make up 53.7% of all reported adult/adolescent HIV Disease cases in the region. Of these 326 HIV Disease cases, 222 (68.1%) are AIDS cases and 104 (31.9%) are HIV cases.
- The 222 AIDS cases make up 55.5% of all reported adult/adolescent AIDS cases in the region. In 2002, of the 19 adult/adolescent AIDS cases reported, 9 (47.4%) were in MSM.
- The 104 HIV cases make up 50.5% of total reported adult/adolescent HIV cases in the region. In 2002, of the 21 adult/adolescent HIV cases reported, 6 (28.6%) were in MSM.
- These numbers, however, do not quite reflect the full extent of MSM involvement since for 18 adult/adolescent AIDS cases, and 23 adult/adolescent HIV cases, the specific exposure category has not yet been determined. These cases are, in general, still under investigation and are currently in the "Other/Unknown" exposure category. If these cases were all assigned to a specific exposure category (i.e., MSM, MSM/IDU, IDU, or heterosexual contact) based on past experience with "Other/Unknown" cases whose exposure category was determined following investigation, the result would be that seen in Table 2 (on page 157). It is estimated that approximately 233 (58.7%) of the 397 total reported adult/adolescent AIDS cases, and approximately 12 (66.7%) of the 18 adult/adolescent AIDS cases reported in 2002 were in MSM. Likewise, it is estimated that approximately 117 (56.8%) of the 206 total reported adult/adolescent HIV cases, and approximately 12 (57.1%) of the 21 adult/adolescent HIV cases reported in 2002 were in MSM.

Who

- Table 5 shows reported HIV and AIDS cases in MSM by race/ethnicity.
- Of the 104 reported HIV cases among MSM, white men comprise 76.9% and black men 19.2%.
- White men comprise 82.9% of total reported AIDS cases among MSM and black men make up 14.9%.
- Table 6 shows reported HIV cases in MSM by race/ethnicity and age group. Among white MSM, the largest proportion
 of reported HIV cases (56.3%) were in men 20-29 years of age at the time of initial diagnosis. Among black MSM, the
 largest proportion of cases (40.0%) were also in men 20-29 years of age at the time of diagnosis.
- Information obtained through interviews with reported MSM HIV and AIDS cases indicates that at least 29% of these men (24% of white men and 57% of black men) have, in addition to having sex with other men, also had sex with females. (Note that the actual percentages could be higher because complete information may not have been obtained on all reported cases.)

Where

- Of the 104 total HIV cases reported in MSM, 64 (61.5%) were from the Boone County, and 9 (8.6%) were from Cole County. The remaining 31 (29.8%) cases were from 16 other counties in the HIV region (each of these counties reported 1-6 cases).
- Table 7 shows reported HIV cases in MSM by race/ethnicity and geographic area. Of total MSM cases reported from Boone County and Cole County, black men make up 21.9% and 11.1%, respectively, while white males make up 73.4% and 88.9% respectively.

Trends

• The annual number of diagnosed HIV cases in MSM has generally been slowly decreasing since 1991, although the estimated number of diagnosed cases in 2001 and 2002 were increased slightly from the preceding years.

Table 5. Reported HIV and AIDS Cases in Men Who Have Sex Wtih Men by Race/Ethnicity, North Central HIV Region, Cumulative Through December 2002

	HIV Cases Cumulative		AIDS Cases Cumulative	
Race/Ethnicity	Case	%	Case	%
White	80	(76.9%)	184	(82.9%)
Black	20	(19.2%)	33	(14.9%)
Other/Unknown	4	(3.9%)	5	(2.3%)
North Central HIV Region Total	104	(100.0%)	222	(100.0%)

Table 6. Reported HIV Cases in Men Who Have Sex With Men by Race/Ethnicity and Age Group,
North Central HIV Region, Cumulative Through December 2002

	WI	nite	BI	ack	Т	otal
Age Group	Cases	%	Cases	%	Cases	s %
13–19	1	(1.3%)	3	(15.0%).	4	(3.8%)
20–29	45	(56.3%)	8	(40.0%).	55	(52.9%)
30–39	25	(31.3%)	7	(35.0%).	33	(31.7%)
40–49	7	(8.7%)	2	(10.0%).	9	(8.7%)
50+	2	(2.5%)	0	(0.0%).	3	(2.9%)
North Central HIV Region	Total80 (100.0%)	20 ((100.0%) .	104	(100.0%)

Table 7. Reported HIV Cases in Men Who Have Sex With Men by Race/Ethnicity and Geographic Area,
North Central HIV Region, Cumulative Through December 2002

	W	White		ack	Total		
Geographic Area	Cases	%	Cases	%	Cases	%	
Boone County	47	(73.4%)	14	(21.9%)	64	(100.0%)	
Cole County	8	(88.9%)	1	(11.1%)	9	(100.0%)	
Remaining Counties	25	(80.6%)	5	(16.1%)	31	(100.0%)	
North Central HIV Region Total	80	(76.9%)	20	(19.2%)	104	(100.0%)	

Row total includes American Indians, Asians and other cases not shown in the table/s. As such, the total of white, black and Hispanic cases shown in the table/s may not add up to the total cases.

Men Who Have Sex With Men and Inject Drugs (MSM/IDU)

Magnitude of the Problem

- From 1984 through 2002, a total of 38 HIV Disease cases in MSM/IDUs have been reported in North Central HIV Region residents (these cases make up 6.3% of all reported adult/adolescent HIV Disease cases in the region). Of these 38 HIV Disease cases, 27 (71.0%) are AIDS cases and 11 (28.9%) are HIV cases.
- The 27 AIDS cases make up 6.7% of all reported adult/adolescent AIDS cases in the region.
- The 11 HIV cases make up 5.3% of total reported adult/adolescent HIV cases in the region.

Who

- Table 8 shows reported HIV and AIDS cases in MSM/IDUs by race/ethnicity.
- Of the 11 total reported HIV cases among MSM/IDUs, white men comprise 81.8%, and black men make up 18.2%.
- White men comprise 85.2% of the 27 total reported AIDS cases among MSM/IDUs and black men make up 14.8%.
- Table 9 shows reported HIV cases in MSM/IDUs by age group. The largest proportion of reported HIV cases (45.4%) were in men 20-29 years of age at the time of initial diagnosis.
- Information obtained through interviews with reported MSM/IDU HIV and AIDS cases indicates that at least 33% of these men have, in addition to having sex with other men, also had sex with females. (Note that the actual percentages could be higher because complete information may not have been obtained on all reported cases.)

Where

- The 11 total HIV cases reported in MSM/IDUs were from 5 counties; each county reported 1-5 cases.
- Table 10 shows reported HIV cases in MSM/IDUs by geographic area.

Trends

• Since the early 1990s, from 0-3 HIV cases have been diagnosed each year in MSM/IDUs.

Table 8. Reported HIV and AIDS Cases in Men Who Have Sex Wtih Men and Inject Drugs by Race/Ethnicity, North Central HIV Region, Cumulative Through December 2002

		Cases nulative		S Cases nulative
Race/Ethnicity	Case	%	Case	%
White	9	(81.8%)	23	(85.2%)
Black	2	(18.2%)	4	(14.8%)
North Central HIV Region Total	11	(100.0%)	27	(100.0%)

Table 9. Reported HIV Cases in Men Who Have Sex With Men and Inject Drugs by Race/Ethnicity and Age Group, North Central HIV Region, Cumulative Through December 2002

	Tot		
Age Group	Cases	%	
13-19	0	(0.0%)	
20-29	5	(45.4%)	
30-39	3	(27.3%)	
40+	3	(27.3%)	
North Central HIV Region Total	11	(100.0%)	

Table 10. Reported HIV Cases in Men Who Have Sex With Men and Inject Drugs by Geographic Area, North Central HIV Region, Cumulative Through December 2002

The 11 total HIV cases reported in MSM/IDUs were from 5 counties; each county reported 1-5 cases.

North Central HIV Region Total11 (100.0%)

Injecting Drug Users (IDUs)

Magnitude of the Problem

- From 1984 through 2002, a total of 45 HIV Disease cases in IDUs[†] have been reported in North Central HIV Region residents (these cases make up 7.4% of all reported adult/adolescent HIV Disease cases in the region). Of these 45 HIV Disease cases, 25 (55.5%) are AIDS cases and 20 (44.4%) are HIV cases.
- The 25 AIDS cases make up 6.2% of all reported adult/adolescent AIDS cases in the region.
- The 20 HIV cases make up 9.7% of total reported adult/adolescent HIV cases in the region.

Who

- Table 11 shows reported HIV and AIDS cases in IDUs by race/ethnicity and gender.
- White males comprise 65.0% of the 20 reported HIV cases among IDUs, white females make up 30.0%, and black males 5.0%. There has not been any reported black female case.
- White males comprise 36.0% of the 25 reported AIDS cases among IDUs, black males make up 36.0%, white females 20.0%, and black females 8.0%.
- Table 12 shows reported HIV cases in IDUs by age group. The largest proportion of reported HIV cases (65.0%) were in persons 30-39 years of age at the time of initial diagnosis.

Where

- Of the 20 total HIV cases reported in IDUs, 6 (30.0%) were from Boone County. The remaining 14 cases were from 10 other counties in the region (each of these counties reported 1-3 cases).
- Table 13 shows reported HIV cases in IDUs by geographic area.

Trends

• During each of the past 6 years, from 0-4 HIV cases have been diagnosed each year in IDUs.

[†] Each male IDU case denied any homosexual contact; if such contact had been reported, the case would have been placed in the men who have sex with men and inject drugs [MSM/IDU] exposure category.

Table 11. HIV and AIDS Cases in Injecting Drug Users by Race/Ethnicity and Gender, North Central HIV Region, Cumulative Through December 2002

		Cases nulative	AIDS Cases Cumulative		
Race/Ethnicity and Gender	Cases	%	Cases	%	
White MaleBlack Male		(65.0%) (5.0%)		` /	
White Female		(30.0%)(0.0%)		(20.0%) (8.0%)	
North Central HIV Region Total	20	(100.0%)	25	(100.0%)	

Table 12. Reported HIV Cases in Injecting Drug Users by Age Group, North Central HIV Region, Cumulative Through December 2002

	Tota		
Age Group	Cases	%	
13-19	0	(0.0%)	
20-29	4	(20.0%)	
30-39	13	(65.0%)	
40+	3	(15.0%)	
North Central HIV Region Total	20	(100.0%)	

Table 13. Reported HIV Cases in Injecting Drug Users by Geographic Area, North Central HIV Region, Cumulative Through December 2002

	l otal				
Geographic Area	Cases	%			
Boone County	6	(30.0%)			
Remaining Counties	14	(70.0%)			
North Central HIV Region Total	20	(100.0%)			

Heterosexual Contacts

Magnitude of the Problem

- From 1984 through 2002, a total of 106 HIV Disease cases in heterosexual contacts have been reported in North Central HIV Region residents. These cases make up 17.5% of all reported adult/adolescent HIV Disease cases in the region. Of these 106 HIV Disease cases, 60 (56.6%) are AIDS cases and 46 (43.4%) are HIV cases.
- The 60 AIDS cases make up 15.0% of all reported adult/adolescent AIDS cases in the region. In 2002, of the 20 adult/adolescent AIDS cases reported, 2 (10.0%) were in heterosexual contacts.
- The 46 HIV cases make up 22.3% of total reported adult/adolescent HIV cases in the region. In 2002, of the 21 adult/ adolescent HIV cases reported, 6 (28.6%) were in heterosexual contacts.
- These numbers, however, do not completely indicate the extent of heterosexual contact involvement since for 18 adult/ adolescent AIDS cases, and 23 adult/adolescent HIV cases, the specific exposure category has not yet been determined. These cases are, in general, still under investigation and are currently in the "Other/Unknown" exposure category. If these cases were all assigned to a specific exposure category (i.e., MSM, MSM/IDU, IDU, or heterosexual contact) based on past experience with "Other/Unknown" cases whose exposure category was determined following investigation, the result would be that seen in Table 2 on page 157. It is estimated that approximately 66 (16.6%) of the 397 total reported adult/adolescent AIDS cases and approximately 4 (22.2%) of the 18 adult/adolescent AIDS cases reported in 2002 were in heterosexual contacts. Likewise, it is estimated that approximately 55 (26.7%) of the 206 total reported adult/adolescent HIV cases and approximately 7 (33.3%) of the 21 adult/adolescent HIV cases reported in 2002 were in heterosexual contacts.

Who

- Table 14 shows reported HIV and AIDS cases in heterosexual contacts by race/ethnicity and gender.
- White females comprise 41.3% of the 46 total reported HIV cases among heterosexual contacts; black females make up 30.4%; white males 15.2%; and black males 10.9%.
- White females comprise 55.0% of the 60 total reported AIDS cases among heterosexual contacts; black females make up 16.7%; white males 15.0%; and black males 8.3%.
- Table 15 shows reported HIV cases in heterosexual contacts by race/ethnicity, and age group. The largest proportion of reported HIV cases (43.5%) were in persons 20-29 years of age at the time of initial diagnosis.

Where

- Of the 46 total HIV cases reported in heterosexual contacts, 14 (30.4%) were from Boone County and 7 (15.2%) from Cole County. Twenty-five other cases were reported from 15 additional counties in the region (each of these counties reported 1-3 cases).
- Table 16 shows reported HIV cases in heterosexual contacts by race/ethnicity and geographic area.

Trends

- As indicated in Table 2 on page 156, a higher proportion of cumulative HIV cases (26.7%), compared to cumulative AIDS cases (16.6%), appear to be heterosexual contacts, providing some evidence that among more recently infected persons an increasing proportion may be heterosexual contacts.
- The annual number of diagnosed HIV cases in heterosexual contacts has remained generally steady in recent years. During each of the past 6 years, between 5-8 HIV cases have been diagnosed each year in heterosexual contacts.

Table 14. Reported HIV and AIDS Cases in Heterosexual Contacts by Race/Ethnicity and Gender,
North Central HIV Region, and Cumulative Through December 2002

		Cases nulative	AIDS Cases Cumulative		
Race/Ethnicity and Gender	Cases	%	Cases	%	
White Male					
White Female	19	(41.3%)	33	(55.0%)	
Black Female	14	(30.4%)	10	(16.7%)	
North Central HIV Region Total	46	(100.0%)	60	(100.0%)	

Table 15. Reported HIV Cases in Heterosexual Contacts by Race/Ethnicity and Age Group, North Central HIV Region, Cumulative Through December 2002

	WI	hite	ВІ	ack	Total	
Age Group	Cases	%	Cases	%	Cases	s %
13–19	2	(7.7%)	2	(10.5%)	4	(8.7%)
20–29	12	(46.1%)	7	(36.8%)	20	(43.5%)
30–39	7	(26.9%)	9	(47.4%)	16	(34.8%)
40–49	4	(15.4%)	1	(5.3%)	5	(10.9%)
50+	1	(3.8%)	0	(0.0%)	1	(2.2%)
North CentralHIV Region Tot	tal26 ((100.0%)	19	(100.0%)	46	(100.0%)

Table 16. Reported HIV Cases in Heterosexual Contacts by Race/Ethnicity and Geographic Area, North Central HIV Region, Cumulative Through December 2002

	WI	hite	Bl	lack	Total	
Geographic Area	Cases	%	Cases	%	Cases	s %
Boone County	5	(35.7%)	9	(64.3%)	14	(100.0%)
Cole County	2	(28.6%)	4	(57.1%)	7	(100.0%)
Remaining Counties	19	(76.0%)	6	(24.0%)	25	(100.0%)
North Central HIV Region Total	26	(56.5%)	19	(41.3%)	46	(100.0%)

Row total includes American Indians, Asians and other cases not shown in the table/s. As such, the total of white, black and Hispanic cases shown in the table/s may not add up to the total cases.

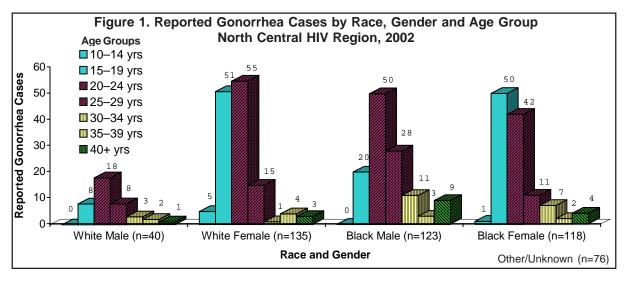
Gonorrhea

Magnitude of the Problem

• During 2002, 492 cases of gonorrhea were reported in the North Central HIV Region; the corresponding rate was 69.2 cases per 100,000 population.

Who

- Of the 492 gonorrhea cases reported in 2002, 187 (38.0%) were in males and 305 (62.0%) were in females. Among whites, a higher proportion of cases were reported in females (77.1%) than in males (22.9%). Among blacks, a slightly higher proportion of cases were reported in males (51.0%) than in females (49.0%).
- Of the 492 gonorrhea cases reported in 2002, 175 (35.6%) were in whites and 241 (49.0%) were in blacks. Five (1.0%) cases were in another racial group, and for 71 (14.4%) cases, race was unknown.
- The rate* of reported cases in blacks (685.0) was about 26 times the rate* in whites (26.8).
- Table 1 on page 171 shows the numbers and rates of reported gonorrhea cases by race.
- Of the 492 gonorrhea cases reported in 2002, 160 (32.5%) were in teenagers. Teenagers made up 50 (42.4%) of the 118 black female cases, 56 (41.5%) of the 135 white female cases, 20 (16.3%) of the 123 black male cases, and 8 (20.0%) of the 40 white male cases.
- Figure 1 shows the distribution of cases by age group for white and black males and females.



Where

- In 2002, of the 492 gonorrhea cases reported, 191 (38.8%) were from Boone County, 72 (14.6%) were from Cole County, and 43 (8.7%) were from Callaway County. The remaining counties in the region each had from 0-41 cases reported. Cases were reported from 25 (75.8%) of the region's 33 counties. Table 2 shows the number, percentage and rates of cases reported from counties having 15 or more cases. Figure 2 is a map showing cases by county.
- The highest rate of reported gonorrhea cases in 2002 was in Marion County (144.9). Table 2 shows rates of reported cases for the region's counties. Table 3 shows rates of reported cases by race and county.

Trends

• Figure 3 shows trends in reported gonorrhea cases by race from 1992-2002. The 492 gonorrhea cases reported in 2002 represented a 28.8% increase from the 382 cases reported in 2001. The increase was fairly even for both whites and blacks.

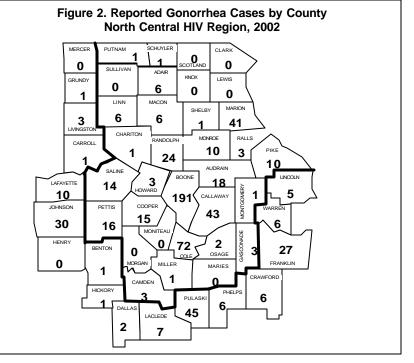
^{*}Per 100,000 population

Table 1. Reported Gonorrhea Cases and Rates by Race, North Central HIV Region, 2002

	Cases	%	Rate*
Whites	175	35.6%	26.8
Blacks	241	49.0%	685.0
Other/Unknown .	76	15.4%	-
Total Cases	492	100.0%	69.2

Table 2. Reported Gonorrhea Cases and Rates by Selected Counties, North Central HIV Region, 2002

	Cases	%	Rate*
Boone	191	38.8%	141.0
Cole	72	14.6%	100.8
Callaway	43	8.7%	105.5
Marion	41	8.3%	144.9
Randolph	24	4.9%	97.3
Audrain	18	3.7%	69.6
Pettis	16	3.3%	40.6
Cooper	15	3.0%	90.0
Total Cases	492	100.0%	69.2



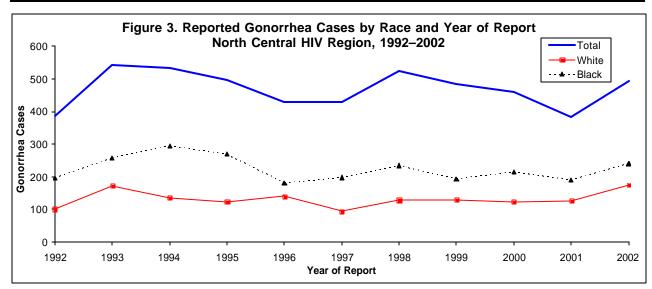
*Per 100,000 population

Table 3. Reported Gonorrhea Cases and Rates by Race and County, North Central HIV Region, 2002

		Total		White			Black			
County	Cases	%	Rate**		Cases	%	Rate**	Case	s %	Rate**
Boone County	191	100.0%	141.0		44	23.0%	38.0	12	7 66.5%	1097.5
Cole County	72	100.0%	100.8		26	36.1%	41.8	3	0 41.7%	423.5
Callaway County	43	100.0%	105.5		20	46.5%	53.4	1	6 37.2%	693.5
Marion County	41	100.0%	144.9		11	26.8%	41.7	1	7 41.5%	1299.7
Randolph County	24	100.0%	97.3		12	50.0%	53.7	1	1 45.8%	634.4
Audrain County	18	100.0%	69.6		5	27.8%	21.2	1	1 61.1%	591.7
Pettis County	16	100.0%	40.6		12	75.0%	33.1		4 25.0%	334.2
Cooper County	15	100.0%	90.0		5	33.3%	33.7		7 46.7%	468.9
North Central HIV Regin	492	100.0%	69.2		175	35.6%	26.8	24	1 49.0%	685.0

**Per 100,000 Population. Note that when the number of cases is less than 5, the rate is considered unstable and should be interpreted with caution.

Note: Row percentages are shown.



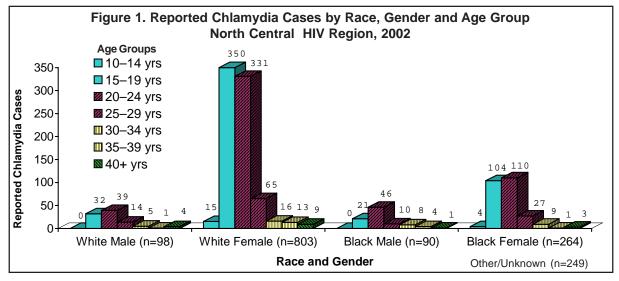
Chlamydia

Magnitude of the Problem

• During 2002, 1,504 cases of chlamydia were reported in the North Central HIV Region; the corresponding rate was 211.4 cases per 100,000 population.

Who

- Of the 1,504 chlamydia cases reported in 2002, 234 (15.6%) were in males and 1,270 (84.5%) were in females. Among both whites and blacks, a much higher proportion of cases were reported in females than in males; with 89.1% vs. 10.9% in whites, and 74.6% vs. 25.4% in blacks.
- Of the 1,504 chlamydia cases reported in 2002, 901 (59.9%) were in whites and 354 (23.5%) were in blacks. Twentynine (1.9%) cases were in other racial groups, and for 220 (14.6%) cases, race was unknown.
- The rate* of reported cases in blacks (1006.2) was about 7 times the rate* in whites (137.8).
- Table 1 on page 173 shows the numbers and rates of reported chlamydia cases by race.
- Of the 1,504 chlamydia cases reported in 2002, 619 (41.2%) were in teenagers. Teenagers made up 108 (40.9%) of the 264 black female cases, 365 (45.5%) of the 803 white female cases, 21 (23.3%) of the 90 black male cases, and 32 (32.7%) of the 98 white male cases.
- Figure 1 shows the distribution of cases by age group for white and black males and females.



Where

- In 2002, of the 1,504 chlamydia cases reported, 454 (30.2%) were from Boone County, 235 (15.6%) from Cole
- County, 100 (6.6%) from Callaway County, and 99 (6.6%) from Marion County. The remaining counties in the region each had from 0-98 cases reported. Cases were reported from 32 of the region's 33 counties. Table 2 shows the number and percentage of cases reported from those counties having the largest numbers of cases. Figure 2 is a map showing cases by county.
- The highest rate of reported chlamydia cases in 2002 was in Boone County (335.2). Table 2 shows rates of reported cases for counties with the most cases. Table 3 shows rates of reported cases by race and county.

Trends

Figure 3 shows trends in reported chlamydia cases by race from 1992-2002. The 1,504 cases reported in 2002 represented a 22.3% increase from the 1,230 cases reported in 2001. The increase is more noticeable among whites. That is also due to a higher number of women getting testing for chlamydia in 2002 because of the Missouri Infertility Prevention Project (MIPP).

^{*}Per 100,000 population

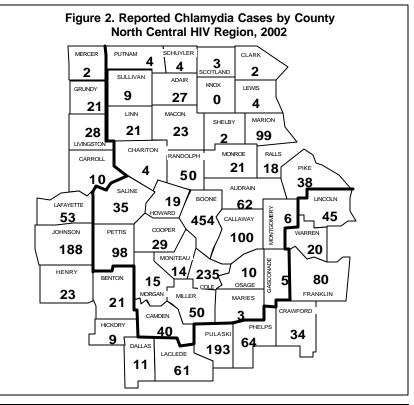
Table 1. Reported Chlamydia Cases and Rates by Race, North Central HIV Region, 2002

	Cases	%	Rate*
Whites	901	59.9%	137.8
Blacks	354	23.5%	1006.2
Other/Unknown	249	16.6%	-
Total Cases	. 1.504	100.0%	211.4

Table 2. Reported Chlamydia Cases and Rates by Selected Counties, North Central HIV Region, 2002

	Cases	%	Rate*
Boone	454	30.2%	335.2
Cole	235	15.6%	329.1
Callaway	100	6.6%	245.3
Marion	99	6.6%	350.0
Pettis	98	6.5%	248.7
Audrain	62	4.1%	239.8
Miller	50	3.3%	212.2
Randolph	50	3.3%	202.7
Camden	40	2.7%	108.0
Pike	38	2.5%	207.1
Saline	35	2.3%	147.3
Total Cases	. 1,504	100.0%	211.4

*Per 100,000 population



		Total			White			Black	
County	Cases	%	Rate**	Cases	%	Rate**	Cases	%	Rate**
Boone County	454	100.0%	335.2	232	51.1%	200.5	163	35.9%	1408.
Cole County	235	100.0%	329.1	113	48.1%	181.8	80	34.0%	1129.
Callaway County	100	100.0%	245.3	63	63.0%	168.4	23	23.0%	997.
Marion County	99	100.0%	350.0	60	60.6%	227.4	20	20.2%	1529.
Pettis County	98	100.0%	248.7	70	71.4%	193.0	6	6.1%	501.
Audrain County	62	100.0%	239.8	37	59.7%	157.1	18	29.0%	968
Miller County	50	100.0%	212.2	37	74.0%	160.2	0	0.0%	0.
Randolph County	50	100.0%	202.7	37	74.0%	165.6	7	14.0%	403.
Camden County	40	100.0%	108.0	27	67.5%	74.6	0	0.0%	0.
Pike County	38	100.0%	207.1	24	63.2%	147.9	5	13.2%	297
Saline County	35	100.0%	147.3	25	71.4%	116.9	5	14.3%	390
North Central HIV Region	1.504	100.0%	211.4	901	59.9%	137.8	354	23.5%	1006

**Per 100,000 Population. Note that when the number of cases is less than 5, the rate is considered unstable and should be interpreted with caution.

Note: Row percentages are shown.

